



GRADE

3

KENTUCKY

K-PREP

Kentucky Performance Rating For Educational Progress



MATH SAMPLE ITEMS

Spring 2012

The following are the general guides that will be used to evaluate your responses to short-answer and extended-response questions in this test.

Kentucky Short-Answer Questions General Scoring Guide

Score Point 2

- You complete all components of the question and communicate ideas clearly.
- You demonstrate an understanding of the concepts and/or processes.
- You provide a correct answer using an accurate explanation as support.

Score Point 1

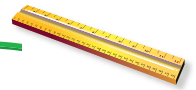
- You provide a partially correct answer to the question and/or address only a portion of the question.
- You demonstrate a partial understanding of the concepts and/or processes.

Score Point 0

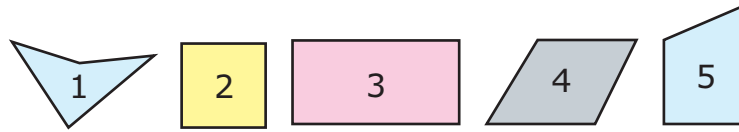
- Your answer is totally incorrect or irrelevant.

Blank

- You did not give any answer at all.

**1**

Katie drew these five polygons.



Which of the five polygons would be classified as both a quadrilateral and a rhombus?

- A** 1, 2, 3, 4, and 5
- B** 2, 3, 4, and 5
- C** 2, 3, and 4
- D** 2 and 4

2

Marlene is playing a number game.
She gives these clues:

- When rounded to the nearest 10, the number is 590.
- When rounded to the nearest 100, the number is 600.

Which number could be
Marlene's mystery number?

- A** 584
- B** 592
- C** 598
- D** 603



3

Evette wrote this expression to find the total number of spoons she saw on tables in a dining room.

$$9 \times 8$$

Which statement describes the numbers of spoons and tables Evette saw?

- A Evette saw 3 round tables and 3 square tables, each with 8 spoons.
- B Evette saw 4 round tables and 8 square tables, each with 5 spoons.
- C Evette saw 5 round tables and 4 square tables, each with 8 spoons.
- D Evette saw 5 round tables and 4 square tables, each with 6 spoons.

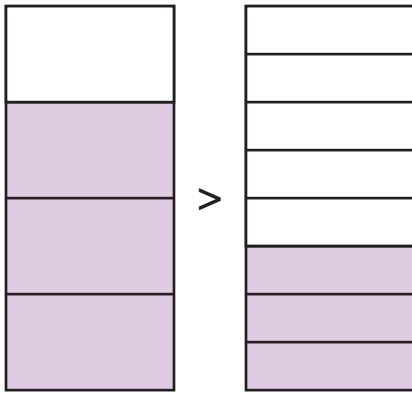


4

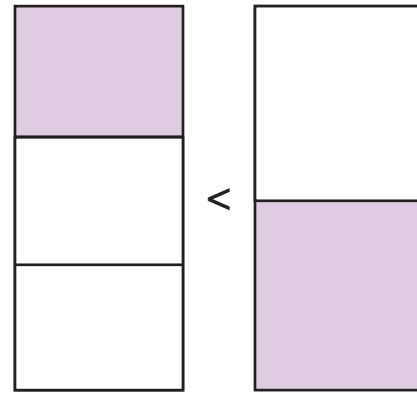
Caroline correctly wrote this statement to compare two fractions.

$$\frac{3}{4} > \frac{3}{8}$$

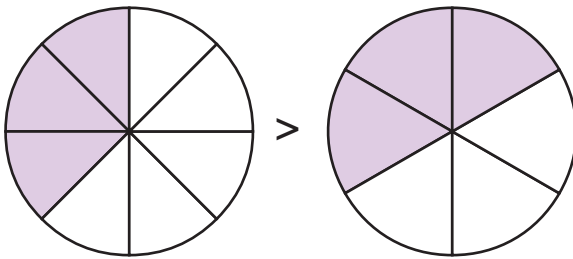
Which model represents Caroline's statement?



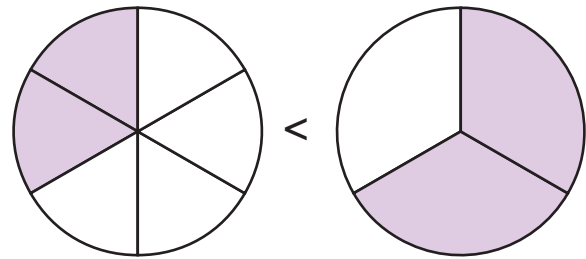
A



C



B



D



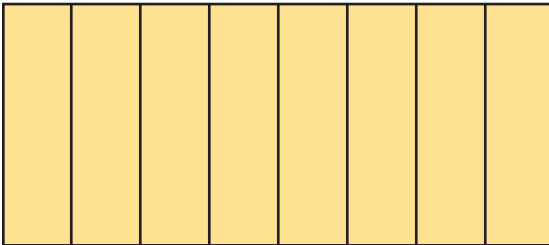
5

Collin separated the shape below into equal parts.

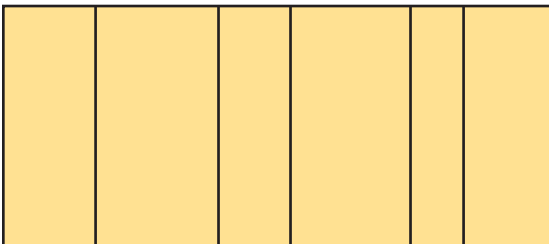


Which picture correctly shows the shape divided into sixths?

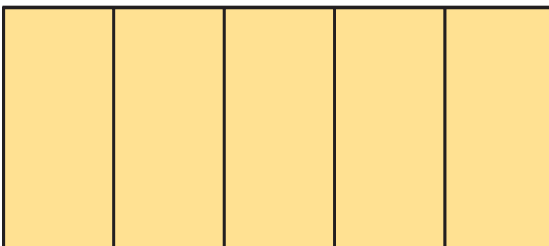
A



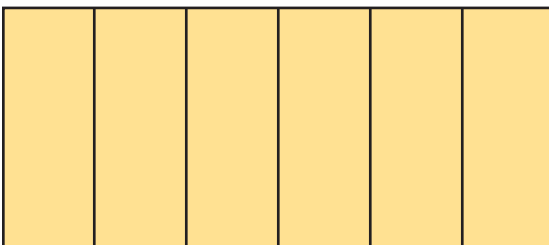
B



C



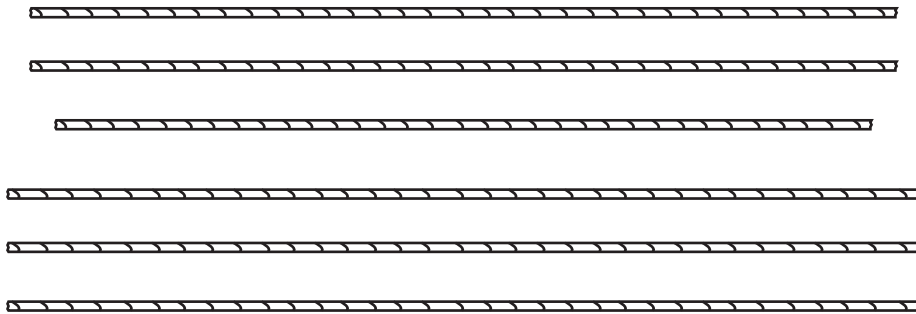
D



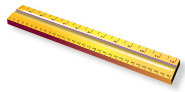


6

Chloe cut 6 strings to make bracelets for her friends. The lengths of the strings are shown below.



Measure each string to the nearest $\frac{1}{4}$ inch using your inch ruler. Make a line plot that shows the lengths of the 6 strings.

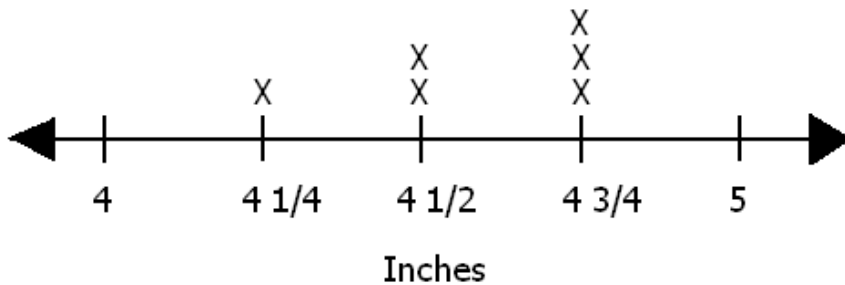


RUBRIC

| | |
|--|--|
| Score Point 2 | <ul style="list-style-type: none">You complete all components of the question and communicate ideas clearly.You demonstrate an understanding of the concepts and/or processes.You provide a correct answer using an accurate explanation as support. |
| Score Point 1 | <ul style="list-style-type: none">You provide a partially correct answer to the question and/or address only a portion of the question.You demonstrate a partial understanding of the concepts and/or processes. |
| Score Point 0 | <ul style="list-style-type: none">Your answer is totally incorrect or irrelevant. |
| Blank | <ul style="list-style-type: none">You did not give any answer at all. |
| Note: No part can be incomplete or incorrect and receive full credit. | |

Correct Answer:

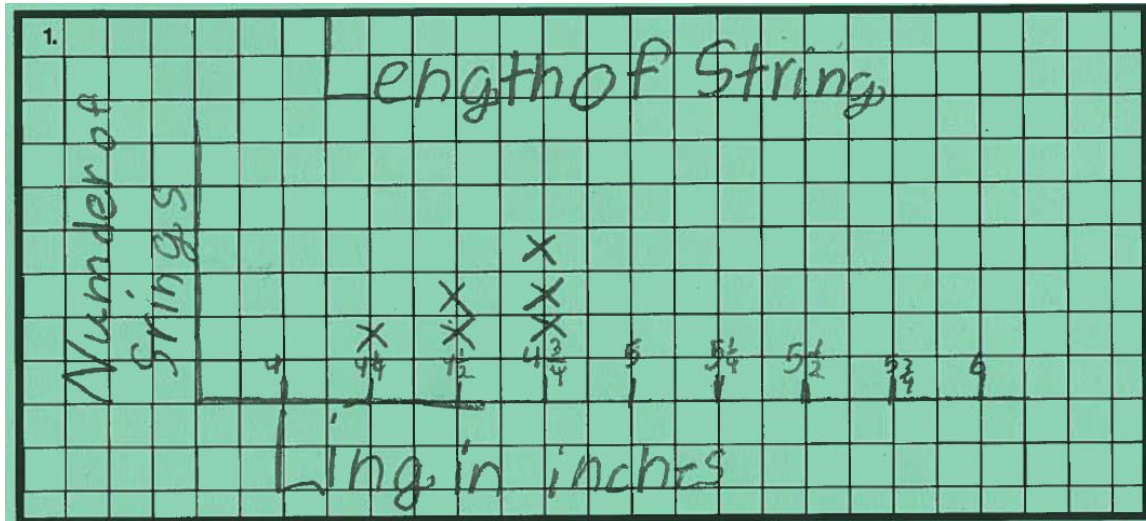
Student shows line plot with one X at $4 \frac{1}{4}$, two Xs at $4 \frac{1}{2}$, three Xs at $4 \frac{3}{4}$. Line plot is appropriately titled and labeled.





Annotated Student Response

SAMPLE 2-POINT RESPONSE



ANNOTATION — 2-POINT RESPONSE

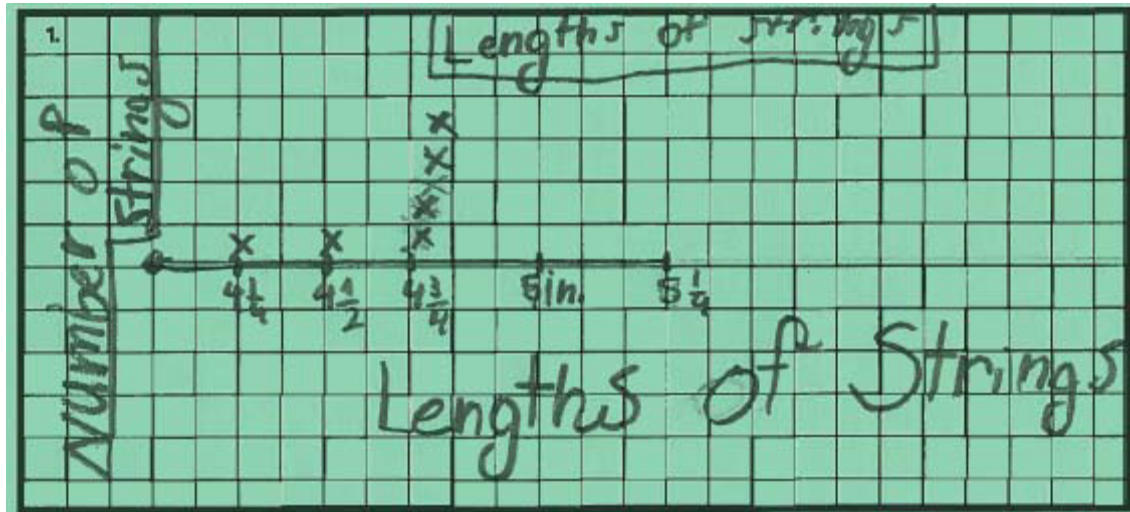
Student shows a line plot with labels and six correct measurements.

Overall, the student earns 2 points.



Annotated Student Response

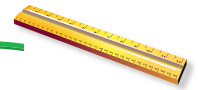
SAMPLE 1-POINT RESPONSE



ANNOTATION — 1-POINT RESPONSE

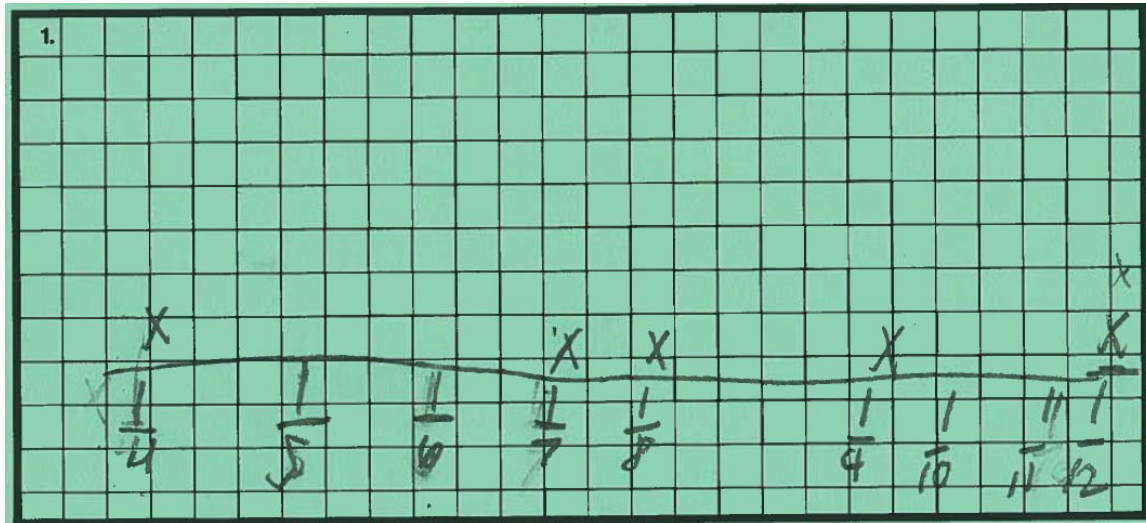
Student shows a line plot with labels and five correct measurements.

Overall, the student earns 1 point.



Annotated Student Response

SAMPLE 0-POINT RESPONSE



ANNOTATION – 0-POINT RESPONSE

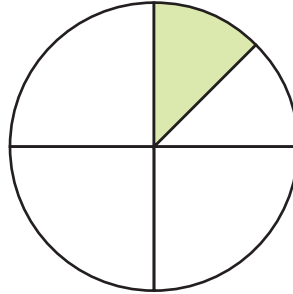
Student does not show a relevant line plot or any correct measurements.

Overall, the student earns 0 points.



7

Sam shaded part of this circle.



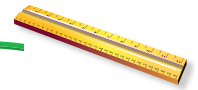
What fraction of the circle is shaded? Explain your answer.

RUBRIC

| | |
|--|--|
| Score Point 2 | <ul style="list-style-type: none">You complete all components of the question and communicate ideas clearly.You demonstrate an understanding of the concepts and/or processes.You provide a correct answer using an accurate explanation as support. |
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| Score Point 0 | <ul style="list-style-type: none">Your answer is totally incorrect or irrelevant. |
| Blank | <ul style="list-style-type: none">You did not give any answer at all. |
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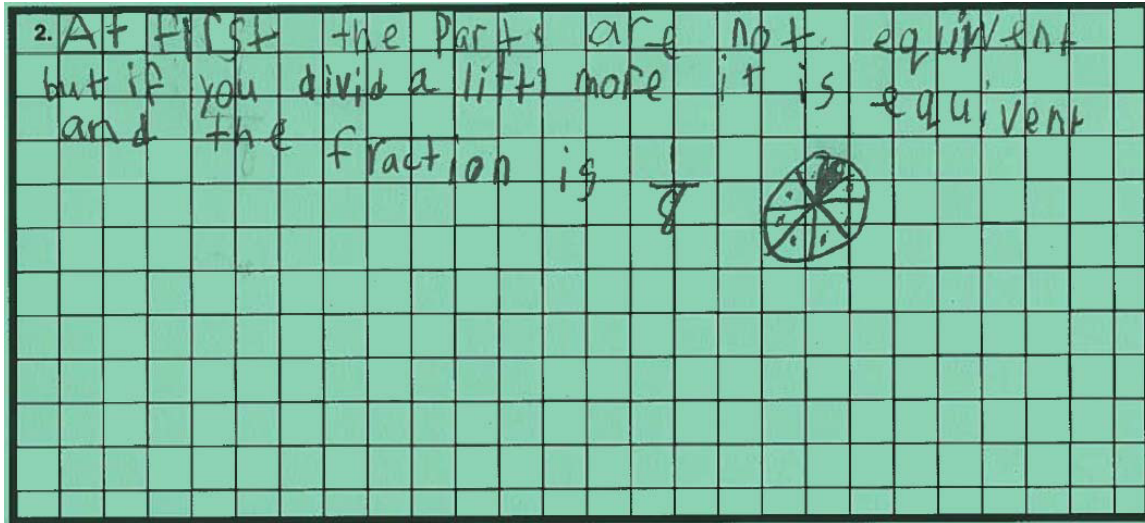
Correct Answer:

The fraction of the circle that is shaded is $\frac{1}{8}$. If you divide the circle into equal pieces there will be 8 total pieces and 1 is shaded.



Annotated Student Response

SAMPLE 2-POINT RESPONSE



ANNOTATION – 2-POINT RESPONSE

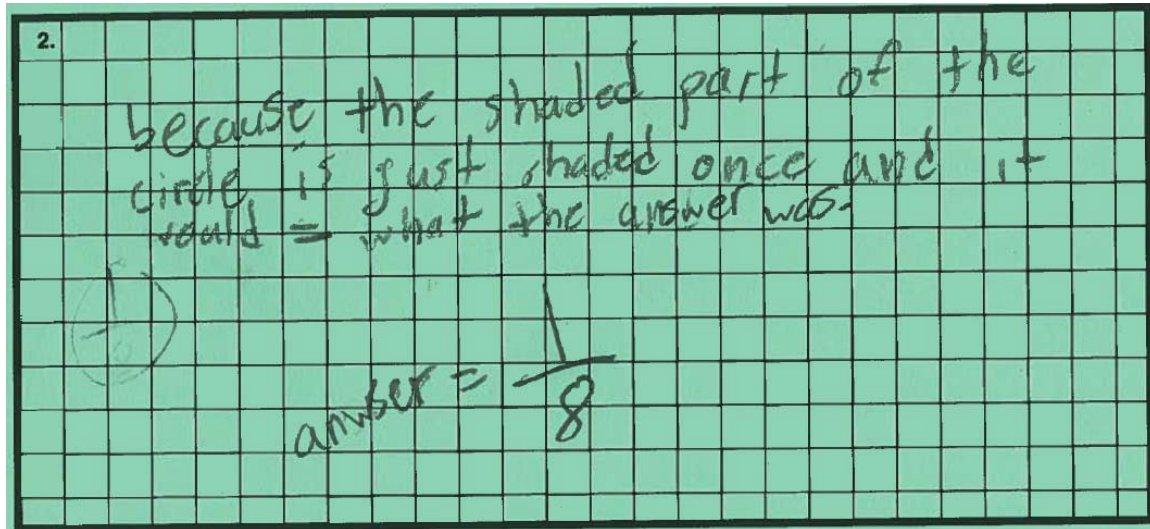
Student provides a correct answer with an accurate explanation.

Overall, the student earns 2 points.



Annotated Student Response

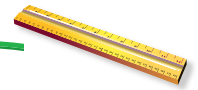
SAMPLE 1-POINT RESPONSE



ANNOTATION – 1-POINT RESPONSE

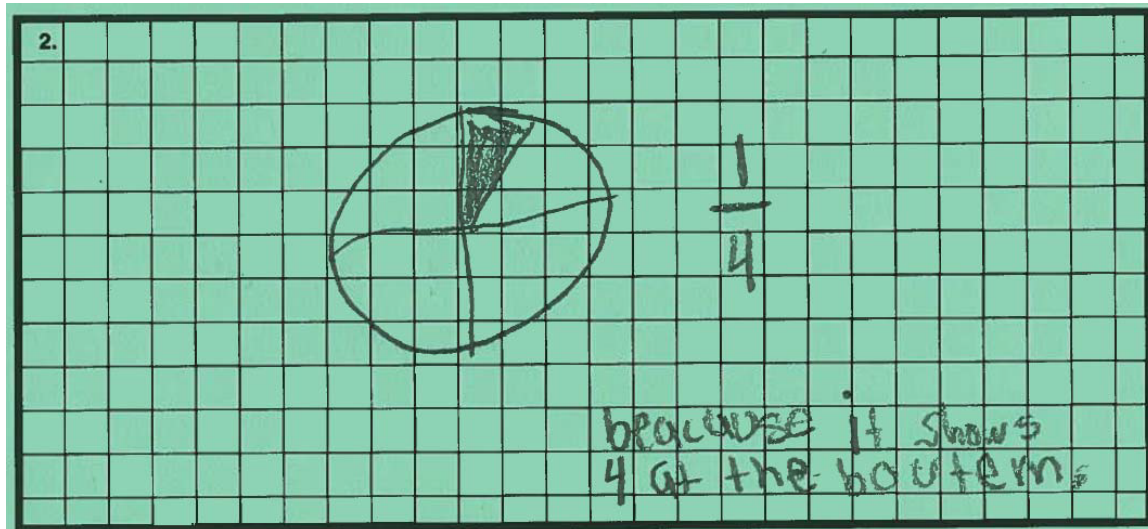
Student provides a correct answer with a partial explanation.

Overall, the student earns 1 point.



Annotated Student Response

SAMPLE 0-POINT RESPONSE



ANNOTATION – 0-POINT RESPONSE

Student provides an incorrect answer with an incorrect explanation.

Overall, the student earns 0 points.

**Item Information**

| Question Number | Key | DOK* | KCAS Primary Standard** |
|-----------------|-----|------|-------------------------|
| 1 | D | 2 | 3.G.1 |
| 2 | B | 2 | 3.NBT.1 |
| 3 | C | 2 | 3.OA.1 |
| 4 | A | 2 | 3.NF.3d |
| 5 | D | 2 | 3.G.2 |
| 6 | NA | 2 | 3.MD.4 |
| 7 | NA | 2 | 3.NF.1 |

*DOK is the abbreviation for Depth of Knowledge. Please note that DOK is associated to the complexity level of an assessment item and is not aligned to the standard. Further information regarding DOK can be accessed on the Kentucky Department of Education website: <http://www.education.ky.gov/kde/instructional+resources/curriculum+documents+and+resources/core+content+for+assessment/core+content+for+assessment+4.1/content+specific+core+content+for+assessment+dok+support+materials.htm>.

**Further information regarding Common Core Standards can be accessed on the Common Core website: <http://www.corestandards.org>.